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International Safeguards

Reducing global nuclear danger, preventing the spread of nuclear weapons, and promoting peaceful uses of nuclear energy

The International Safeguards Section of the Center for International Threat Reduction (CITR) in Oak Ridge provides independent assurance of national commitments for the use of nuclear materials. These assurances can be provided through support for international organizations such as the Brazilian-Argentine Agency for Accounting and Control of Nuclear Materials (ABACC) or through bilateral arrangements.

International Safeguards supports the International Atomic Energy Agency (IAEA) through the United States Support Program established by the U.S. Department of State. Current major projects include the development of measurement methods and procedures used by IAEA inspectors to verify facility declarations at uranium enrichment plants, enhancement of

precision and accuracy of advanced laboratory instrumentation used to measure environmental samples, and training of inspectors on safeguards-relevant features of key nuclear facilities.

Support for other regional and national safeguards organizations is conducted through Safeguards Cooperation agreements between those organizations and the U.S. Department of Energy (DOE). Oak Ridge is the lead contractor for DOE's safeguards agreement with ABACC, the Argentine

Nuclear Regulatory Authority, and the National Nuclear Energy Commission of Brazil. Additionally, support is being provided for agreements with South Korea and the European Safeguards community. Current projects are focusing on the development and evaluation of strengthened safeguards measures (for example, remote monitoring, environmental sampling, and information

management). New emphasis is being placed on the operational testing and evaluation of advanced monitoring systems before they are installed at nuclear sites. A Safeguards Technology Center is being established to make it easier to collaborate with foreign inspectors and facility personnel in developing, testing, and evaluating advanced safeguards systems.

The International Safeguards Section also serves as a key technical resource for preparing for and implementing IAEA safeguards at DOE facilities in the United States. Since 1994, more than 70 inspections have been conducted on surplus highly enriched uranium stored at the Oak Ridge Y-12 Plant, and there have been no anomalies. Technical support is provided to DOE in preparing other sites for inspections by conducting site visits, tutorials, and exercises, as necessary. Current efforts are focused on assisting DOE to prepare for the Protocol Additional to the U.S. Voluntary Offer, signed by President Clinton in 1998, which will require the United States to make many additional declarations of U.S. nuclear fuel-cycle-related activities.



CENTER FOR INTERNATIONAL THREAT REDUCTION

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Partnership to Prevent Food Contamination

Former Soviet biological weapons scientists; Oak Ridge National Laboratory; the U.S. Department of Agriculture's Agricultural Research Service; and Wayne Farms, LLC, are collaborating to develop novel and therapeutic products, called probiotics, which are antibiotic-like natural agents effective in preventing the contamination of food by pathogenic bacteria. The Republic of Kazakhstan has a rich availability of microorganisms with antibacterial-like activity, an untapped source of probiotics.

A menacing feature of disease control emerging in the U.S. and throughout the world is the mounting resistance of

pathogenic microorganisms to traditional antibiotics used to ward off infectious diseases. The prime focus of this cooperative project is identifying probiotics and the molecular entities they synthesize to keep pathogens at bay.

The products will be available for U.S. consumer markets as well as those in Kazakhstan and could lead to attractive business opportunities for satisfying the U.S. population's demand for safer food.
<http://ipp.lanl.gov>



INMM FALL MEETING CENTRAL REGION CHAPTER – INSTITUTE OF NUCLEAR MATERIALS MANAGEMENT OCTOBER 16-17, 2000

GARDEN PLAZA HOTEL, OAK RIDGE, TENNESSEE

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ANSENS WINTER MEETING AMERICAN NUCLEAR SOCIETY/EUROPEAN NUCLEAR SOCIETY NOVEMBER 13-17, 2000 MARRIOTT WARDMAN PARK HOTEL, WASHINGTON, DC

<http://www.ans.org/meetings/winter/>

Director's Note

One of my favorite sayings is, "The only thing constant is change." At the national level, with the presidential election approaching in November, we will have a change in administrations, which will without doubt have an impact on both foreign and domestic policies. Also, with the creation of the National Nuclear Security Administration (NNSA), there will be an increased focus on nonproliferation and its impact on national security. Here in Oak Ridge, Oak Ridge National Laboratory and the Y-12 Plant are already seeing many changes as the DOE mission changes and becomes refocused. ORNL and Y-12 recently have changed operating contractors, and all of the ramifications are still being determined. Change is often inevitable and these changes are unavoidable. However, we can view these as opportunities as well as challenges.

—Larry Satkowiak



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